

The temporary ILRS reference frame: SLR2005

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The latest reference frame ITRF2005 is based on the time series of station positions and Earth Orientation Parameters provided by the IERS Services. The input ILRS time series covered the years from 1993 to 2005 and its limited time span caused two main effects in ITRF2005: the absence of the older SLR stations and bad estimates for those stations which quit observing at the beginning of the 90s.

To overcome the problem, a new TRF has been generated from the combination of ITRF2000, ITRF2005 and the new SLR stations, i.e. the ones which became active after the development of ITRF2005, have been included. Its tentative name is SLR2005, although it is not based only on SLR data, simply to denote that it only includes SLR sites.

This TRF will be temporary and used by the AWG until a new ILRS reference frame is derived from the official ILRS combined weekly solutions. Comparisons with ITRF2000 and ITRF2005 will be presented in terms of coordinate residuals and velocities.